

THE CASE FOR ALTERNATIVE VOTING METHODS: THE IMPACT OF STATE
ELECTORAL LAWS ON VOTER TURNOUT

by
Dalex Carrillo

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1. Abstract

State laws determine alternative voting options and play a role in U.S. voter turnout as a result.

Studies of voter turnout focus on voter registration, access, and mobilization factors aggregated at the national level. However, there are limitations when not accounting for voter options and other state-level variables. This study uses multiple regression to demonstrate that no-excuse absentee voting, the early voting period, and the voter registration closing period significantly and positively impact voter turnout across states during the 2016 presidential election. The model considers demographic variables like age, education, and race along with mobilization variables like state campaign finance and the presence of gubernatorial and senate races. After controlling for these variables, states with no-excuse absentee voting, longer early voting periods, and voter registration deadlines closer to election day had higher voter turnout during the 2016 election. This evidence supports the cost-benefit voting theory that if the cost to vote is lowered, more people will vote.

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2. Introduction

After every presidential election, there is discussion around low voter turnout in the United States. According to the U.S. Census Bureau, 61.4% of the citizen voting age population reported casting a ballot in 2016, a number not statistically different from the 61.8% who reported voting in 2012.¹ Voting has gone through extensive reforms throughout the nation's history, notably with changes in election laws and voting procedures at the federal and state levels. Dozens of states have instituted alternative voting methods such as early voting, no-excuse absentee voting, universal vote by mail, and election-day registration. As a result of less restrictive voting procedures, it follows that more people should vote. This study aims to determine the extent to which this is true.

First, this research explores the competing theories around voter participation and turnout in federal elections. It compares the resources-based theory, which looks at voter access, to the mobilization theory, which considers voter empowerment. Additionally, it describes historic changes and additions to voting laws and their reported impact on turnout, starting with the National Voter Registration Act. In assessing voting reforms, this research considers the structural-legal theory of voter participation, which emphasizes the role that voting laws play on electoral turnout.

By the end, this analysis will examine the relationship between alternative voting methods and turnout of the voting age population (VAP) in the United States during the 2016 presidential election. By running a multivariate regression analysis that considers alternative

¹ U.S. citizens reported voting from "Table 1: Reported Voting and Registration, by Sex and Single Years of Age: November 2016" Part of: Voting and Registration in the Election of November 2016. U.S. Census Bureau Current Population Survey. Available at <https://www.census.gov/data/tables/time-series/demo/voting-and-registration/p20-580.html>; U.S. citizens reported voting from "Table 1: Reported Voting and Registration, by Sex and Single Years of Age: November 2012" Part of: Voting and Registration in the Election of November 2012. Available at <https://www.census.gov/data/tables/2012/demo/voting-and-registration/p20-568.html>.

voting method, demographic, and mobilization factors, this study determines whether electoral participation in the U.S. presidential elections is greater as a result of voting reforms. Preliminary results shed light on which voting reforms could have contributed to increased voter turnout. In brief, the models show that no-excuse absentee voting, the early voting period, and the voter registration closing period significantly and positively impact voter turnout across the states. After controlling for resources and mobilization variables, states with no-excuse absentee voting, longer early voting periods, and voter registration deadlines closer to election day had higher voter turnout during the 2016 election. Overall, this study is a contribution to the existing research on participation in U.S. elections and provides an evaluation of the impact of state voting reforms on electoral turnout in those states.

3. Literature Review and Theoretical Framework

When analyzing voter turnout in U.S. federal elections, there are several competing theories for why Americans decide to vote, including the resources-based and mobilization theories. This study assesses these two theories and their potential impacts to voter turnout. At the same time, it analyzes the state voting laws in place during the 2016 election under the structural-legal theory, or how additional voting options provide more opportunities for voters to cast their ballots.

3.1 The Resources-Based Theory Model

The access that Americans have to education, job opportunities, and even time are underlying factors for why he or she votes in an election. This is the reasoning behind the resources-based theory, which includes dynamics in income, time, occupation, and education, as determinants of an individual's decision to vote. For instance, economic adversity is found to reduce voter turnout in that financially unstable and unemployed individuals are less likely to

vote in upcoming elections.² The logic is that the voter is more focused on making ends meet and finding solutions to his or her current problems rather than voting or political engagement.³ In this case, there is a balance of opportunity costs because when a person votes, he or she forgoes scarce resources that could have been used to address a personal concern. When the return from attending to a stressful personal situation is greater than the return from voting, then the opportunity costs are higher and the individual is less likely to participate in politics in the future.⁴ Likewise, other factors within the resources-based theory impact voter turnout. In their research, Wolfinger and Rosenstone found that education was strongly and positively related to voter turnout in the 1972 presidential election, while the relationship between income and turnout was weaker comparatively.⁵

Nonetheless, demographic characteristics underly the resources-based model, especially when it comes to voter access. In early research, scholars show socioeconomic status, race, gender, age, and marital status as predictors of election behavior.⁶ However, the country is vastly different now compared to the 1972 election when Wolfinger and Rosenstone's conducted their analyses. The proportion of non-Hispanic whites has declined from 83.2% of the population to 60.4% in 2018. The proportion of Black or African Americans increased from 11.1% of the population to 13.4% in 2018, and the proportion of Hispanics of any race increased from 5.7% to 18.3%.⁷ Similarly, the median income in 1972, all races considered, was \$21,800, compared to

² Raymond E. Wolfinger and Steven J. Rosenstone, *Who votes?*, (New Haven, CT: Yale University Press, 1980).

³ Richard A. Brody and Paul M. Sniderman, "From life space to polling place: The relevance of personal concerns for voting behavior," *British Journal of Political Science* 7, no. 3 (1977): 358-59.

⁴ Steven J. Rosenstone, "Economic Adversity and Voter Turnout," *American Journal of Political Science* 26, no. 1 (1982): 41-44.

⁵ Wolfinger and Rosenstone, *Who Votes?*.

⁶ Steven J. Rosenstone and John Hansen, *Mobilization, Participation, and Democracy in America*, (Michigan: The University of Michigan, 1993); Sidney Verba and Norman H. Nie, *Participation in America: Political Democracy and Social Equality*, (New York: Harper and Row, 1972).

⁷ Proportion of non-Hispanic Whites, Black or African American, and Hispanics for 2018 from "Table: Annual Estimates of the Resident Population by Sex, Race, and Hispanic Origin for the United States: April 1, 2010 to July 1,

\$38,813 in 2018.⁸ Current resources-based models do not include updated values for race and socioeconomic distributions. The same holds true for gender and age discrepancies along income, education, and occupation. Including updated data in voter turnout models could provide a representative portrayal of how demographic factors impact resource availability for U.S. voters and how this impacts electoral turnout.

3.2 The Mobilization Theory Model

The second theory of voter participation is the mobilization model, which includes the activities and efforts of campaigns, political parties, and interest groups to motivate voters to participate on election day. While the resources-based theory contends that economic hardship decreases voter participation, this model argues that it can increase turnout. The reasoning is that citizens are more likely to blame the government and its leaders for a situation they cannot control, like inflation, depression, and economic structural changes.⁹ As a result, they may feel more empowered to organize, lobby, protest, and vote for the candidate or policy that addresses their needs.

Zipp uses the mobilization model to argue that voters are drawn to candidates that take clear positions on the issues and offer policy choices that match his or her individual preferences.¹⁰ Moreover, as the 1998 Kansas State Board of Education election revealed, a personal approach to mobilizing voters can be more effective than an impersonal approach.¹¹ At

2019" Part of: National Population by Characteristics: 2010-2019. U.S. Census Bureau. Available at <https://www.census.gov/data/tables/time-series/demo/popest/2010s-national-detail.html>; Proportion of Anglos Part of: 1970 Census of Population, Advance Reports: General Population Characteristics: 1970. U.S. Census, 1970. Available at: <https://www.census.gov/library/publications/1971/dec/pc-v2.html>

⁸ Median income data for nonfamily households from "Table: A-1: Income Summary Measures by Selected Characteristics: 2018 and 2019," Part of: Income and Poverty in the United States: 2019. U.S. Census Bureau Current Population Survey. Available at <https://www.census.gov/library/publications/2020/demo/p60-270.html>.

⁹ Kay Lehman Schlozman and Sidney Verba, *Injury to Insult*, (Cambridge: Harvard University Press, 1979).

¹⁰ John Zipp, "Perceived Representativeness and Voting: An Assessment of the Impact of 'Choices' and 'Echoes,'" *American Political Science Review* 79, (1985): 55-58.

¹¹ Donald Green and Alan Gerber, "Introduction: Why Voter Mobilization Matters," In *Get Out the Vote*, 3rd ed., (Brookings Institution Press), 9.

the local level, this election featured an organized campaign that personally contacted voters to mobilize them in a traditionally low-turnout area. Proponents of this model debate that resources without mobilization are simply inadequate to motivate citizens to vote.

However, here too, the research lacks variance in mobilization factors across demographics, like socioeconomic status. For example, a candidate on the ballot may be addressing a policy issue that directly impacts his or her constituents. However, if those that are economically disadvantaged are not politically engaged, then the candidate is likely listening and targeting his or her efforts towards the engaged group only. In this case, mobilization efforts are focused on that one group, and the policy choices do not address the general constituency. Including demographic data within the mobilization model would reveal which strategies work along diverse groups and which mobilization efforts are effective in increasing voter turnout, specifically.

3.3 Enacted Voting Legislation

Critical in the debate of voter turnout is the implementation of voting laws, starting with the National Voter Registration Act (NVRA). Passed in 1993, the NVRA requires states to offer the opportunity for citizens to vote at all state agencies providing drivers licenses and public benefits. Before the passage of the NVRA, Wolfinger and Rosenstone found a negative relationship between registration closing date and voter turnout in the 1972 presidential election.¹² In their examination of state registration law implementation, they found that the greater the number of days prior to the election that voter registration closes, the lower an individual's probability of voting in that election. Since its passing, scholars have investigated the effects of the NVRA on registration and turnout. For instance, while Brown and Wedeking

¹² Wolfinger and Rosenstone, Who Votes?.

found that the NVRA did not increase turnout significantly, their research did reveal that it increased voter registration.¹³ Under the structural-legal theory, there are two hurdles when it comes to the voting process: voter registration and casting a ballot.¹⁴ The NVRA addresses the former by reducing the costs of registration, especially for underrepresented groups that utilize public agencies.

Since the NVRA, states have pushed for and enacted more voting laws, such as election day registration, registering and voting by mail, absentee voting, and early voting. However, their effectiveness in increasing voter turnout has been highly contested, specifically around absentee and early voting options. For the most part, researchers argue that there is little evidence that these laws increase voter turnout. In her examination of whether early voting procedures impact electoral participation, Fitzgerald found that structural-legal remedies alone are not effective solutions to low voter turnout.¹⁵ Voters using alternative methods are simply switching the way in which they vote. If these methods were not available, they would vote by other means, even if that means traditional in-person voting. Leaning in the direction of the mobilization and resources-based models, she argues that citizens must choose to be active and have the proper resources and interests to do so. Similarly, studies of early voting suggest that individuals who are most likely to take advantage of new voting methods are those who would vote on election day anyway because they tend to be politically engaged and partisan.¹⁶

¹³ Robert Brown and Justin Wedeking, "People Who Have Their Tickets but Do Not Use Them – 'Motor Voter,' Registration, and Turnout Revisited," *American Politics Research*, 34, no. 4 (2006).

¹⁴ Richard Timpone, "Ties That Bind: Measurement, Demographics, and Social Connectedness," *Political Behavior*, 20, no. 1 (1998).

¹⁵ Mary Fitzgerald, "Greater Convenience but Not Greater Turnout—The Impact of Alternative Voting Methods on Electoral Participation in the United States," *American Politics Research*, 33, no. 6 (2005): 854-58.

¹⁶ Grant Neely and Lillard Richardson, "Who Is Early Voting? An Individual Level Examination." *Social Science Journal*, 38, no. 3 (2001).

Therefore, so far, research studies show that increased voting option simply ease the voting process for those already inclined to vote.

When it comes to research on voter turnout, there are limitations that are important to note. One is that most empirical studies on voting laws and turnout have focused on one reform at a time, whether it be same-day registration, early voting, or absentee voting. Research studies also tend to look cross-sectionally over brief periods of time, such as Wolfinger and Rosenstone's 1972 presidential election study, rather than over a series of election years. In addition, current research does not include voter turnout data for the most recent presidential elections, notably the 2016 election, nor recently enacted state voting laws. To get an accurate portrayal of the relationship between state election laws and voter turnout, this data along with the factors contributing to the resources-based and mobilization models should be analyzed.

3.4 Theoretical Framework

This research study will determine the relationship between the voting age population (VAP) turnout and state voting laws within the framework of existing theories. The resources-based theory, which considers the role of income, time, and civic engagement skills, will be included in the study through underlying demographic factors like age, education, and race. Likewise, this study will include mobilization factors through campaign raising and the presence of senatorial and/or gubernatorial races. These variables will be analyzed alongside state voting laws in place during the 2016 presidential election. For the purposes of this study, state voting laws will include election day registration, early voting, and absentee voting. Ultimately, this study will attempt to find whether additional voting options passed through state legislation increase voter turnout considering the resources and mobilization criteria that may also influence whether an individual votes in a federal election.

4. Data and Methods

To determine the impact of alternative voting methods on voter turnout, 2016 state-level data is aggregated. The 2016 election was selected because of the importance and excitability around presidential elections, which often results in higher voter turnout compared to midterm and off-election years. Additionally, this was the last presidential election held in the United States and, therefore, has the most recent enactment and utilization of voting laws.

The primary goal of this analysis is to measure the impact of alternative voting methods on aggregate levels of voter turnout in the 50 states. Specifically, this research aims to determine whether legal reforms to the voting process, which make registration and voting more convenient, lead to greater turnout in American elections. The percentage of voter turnout of the voting age population (VAP) represents the dependent variable in the model. Although this figure includes segments of the population who are not eligible to vote, such as convicted felons, undocumented immigrants, and those living in mental institutions, it represents the best and most commonly used measure of voter participation in elections.¹⁷ VAP turnout is also used instead of the turnout of registered voters because many local election officials may not adequately monitor or update their registration lists. To capture this, the U.S. Census Bureau's Voting and Registration in the Election of November 2016 dataset is used. Table 4a of this cross-sectional and observational dataset contains the reported VAP turnout percentages for the states and the District of Columbia, totaling 51 observations. For the purposes on this study, the turnout percentage value for each observation is used, thereby, also solidifying this as the unit of analysis.

¹⁷ Royce Crocker, "Voter registration and turnout: 1948-1998," *CRS Report for Congress: CRS-122*. Washington, DC: Congressional Research Service, (1996).

To determine the impact that state voting laws have on participation in presidential elections, independent variables representing alternative voting methods are incorporated into the model. Specifically, these variables are no-excuse absentee voting, early voting, universal mail-in voting, automatic voter registration, and same-day voter registration. Because these reforms reduce the costs of voting by making registration and casting a ballot more convenient, they are expected to have a positive impact on turnout. This study draws on multiple data tables compiled by the National Conference of State Legislatures (NCSL) of the alternative voting options in place during the 2016 election. These include: VOPP: Table 1: States with No-Excuse Absentee Voting, State Laws Governing Early Voting, Details for Same Day and Election Day Registration States, Table 1: Voter Registration Deadlines, and Table 2: States that have enacted automatic voter registration. This study codes the nominal variables as follows: if the state had the voting law enacted during the 2016 presidential election, then it was designated a 1 and 0 otherwise. The study also analyzed the early voting time period and the number of days between the voter registration deadline and election day to assess their impact. These timeframes are measured in number of days and the information is also pulled from the NCSL informative tables.

Race, age, and education have shown to impact voter participation and so have campaign finance and the presence of a gubernatorial and/or senatorial race. Therefore, in addition to the variables representing alternative voting methods in the states, this model includes confounding variables accounting for demographic attributes and electoral competition. For the latter, the reasoning is that individuals and committees pump large amounts of money into highly competitive races where voters are invested and likely to get out the vote. Similarly, if the state governor or senator is also on the ballot, voters are more likely to turnout.

For the race and age demographic variables, this study uses two U.S. Census Bureau Voting and Registration in the Election of November 2016 datasets. Specially, Table 4b, Reported Voting and Registration by Sex, Race and Hispanic Origin, for States, captures race distribution and Table 4c, Reported Voting and Registration by Age, for States: November 2016, records age distribution of voters. The education variable is specified using the Current Population Survey Voting and Registration Supplement for 2016. For the three demographic variables, the percent of individuals that voted during the 2016 is recorded. Here, it is noted that the race and age variables were modified in certain states for the following indicators: Black, Asian, and Hispanic for the race variable and ages 18-24, ages 25-34, ages 35-44, and ages 65 and over for the age variable. The U.S. Census Bureau does not share data when the citizen population base is less than 100,000 because it is too small to show the derived measure. This was the case in certain states for the indicators mentioned above. For the purposes of this research, the model inputs a 0 for these instances as they are not considered in the voter turnout representations for the state either.

To account for electoral competitiveness and its impact on voter turnout, this study used the National Governor’s Association’s 2016 Gubernatorial Elections in the States and Territories data and the U.S. Senate official Class III - Senators Whose Terms of Service Expire in 2023 table to record the states with gubernatorial and U.S. senatorial elections held in 2016.¹⁸ For this study, this variable takes on the value “1” for states holding either election or “0” for those not holding elections. The third variable considering political mobilization, state campaign finance, is derived from the Election Overview – Election Summary and Committee Summary Totals for 2016 on FollowTheMoney.org, which is licensed by the National Institute on Money in Politics

¹⁸ Senators in Class III were elected to office in the November 2016 general election.

and the Campaign Finance Institute. For this study, the total finance dollars raised by elections, candidates, and committees in each state is recorded. Notably, this variable considers campaign raising by state actors rather than for or by presidential candidates and committees in order to measure election mobilization state-by-state. By incorporating alternative voting, demographic, and electoral competitiveness variables, this model controls for the difficult to measure state-specific factors impacting turnout.

With the dependent, independent, and confounding variables determined, this study calls for two multivariate regression models. The models draw from Leighley's and Nagler's Cross-Sectional Time Series Model of Turnout by State, 1972-2008 study in which alternative voting methods, demographic variables, and electoral competitiveness are analyzed in a regression model measuring voter behavior over 36 years.¹⁹ For the purposes of this study, state-level data is aggregated in a pooled and cross-sectional analysis for the 2016 presidential election only.

Model 1 measures the impact of alternative voting methods on voter turnout. It treats the adoption of these voting methods as interventions and assesses whether they raised or lowered voter turnout. Model 2 incorporates the demographic and electoral competitiveness variables, or the underlying observable factors claimed to influence turnout. As a result, both models incorporate changes and differences across states rather than generalized across U.S. voters. Moreover, Model 2, in particular, conditions observable factors and avoids drawing inferences that no other factors related to turnout changed in ways correlated with the adoption of voting reforms.

¹⁹ Jan Leighley and Jonathan Nagler, *Who Votes Now?*, (Princeton: Princeton University Press, 2014), 114.

5. Results

This study investigates the impact of state voting laws on the turnout of the citizen voting age population during the 2016 presidential election. The hypothesis is that in a comparison of U.S. states, those with expanded legal options to vote are more likely to experience higher voter age population turnout than those with less voting options.

For contextual purposes, the independent variables are analyzed starting with the voting laws in place during the 2016 election. Table 1 shows the number of states with alternative options to vote. In summary, 34 states do not require voters to have an excuse to vote by mail, 38 states provide voters with the option to vote early in-person, 4 states send mail-in ballots to all eligible voters, 4 states automatically register voters i.e., at the DMV, and 23 states allow voters to register when they cast their ballot in-person. The latter two are significant to note because they remove barriers in the voter registration process, which is the first step in voting according to the structural-legal theory.²⁰

Table 1: Number of States with Voting Laws Enacted, 2016

Voting Law	Number of States
No-Excuse Absentee Voting	34
Early Voting	38
Universal Mail-In Voting	4
Automatic Voter Registration	4
Same-Day Voter Registration	23

Next, Table 2 shows the central tendency or average (when applicable), standard deviation, minimum value, and maximum value for the independent variables of interest. By accounting for the following independent variables, the model considers the resources-based and mobilization theories in the literature on voter turnout. It is worthwhile to note the average registration and early voting period. On average, the voter registration deadline is about 21 days

²⁰ Richard Timponi, "Ties That Bind: Measurement, Demographics, and Social Connectedness," *Political Behavior*, 20, no. 1 (1998).

before an election and the early voting period is about 15 days. In terms of voter resources and access, the numbers affirm that individuals that are white non-Hispanic, over 65 years in age, and hold a college degree are more likely to vote. As mentioned previously, certain race and age population bases surveyed by the U.S. Census Bureau were less than 100,000 voters. As a result, the survey did not portray these values because they were too small to show the derived measure. This is also why the minimum value is 0 for these variables in Table 2. For voter mobilization, campaign finance data shows that campaigns and committees cumulatively raised about \$103,000,000 in a state during the 2016 election year and most states did not hold gubernatorial or senatorial elections. The latter is not surprising because senators and governors are up for election every 6 or 4 years, respectively, and not at all at once. Therefore, only a given number are up for election at any given year.

Table 2: Descriptive Statistics for Voter Turnout by Variables by State

Variables Measuring State Voting Laws	Central Tendency/Average	Standard Deviation	Minimum	Maximum
No-Excuse Absentee Voting	Yes	-	-	-
Early Voting	Yes	-	-	-
Universal Mail-In Voting	No	-	-	-
Automatic Voter Registration	No	-	-	-
Same-Day Voter Registration	No	-	-	-
Registration Deadline Days Before Election	21.33	8.14	1	30
Early Voting Period (days)	15.22	14.47	0	45

Variables Measuring Voter Resources	Average (%)	Standard Deviation	Minimum (%)	Maximum (%)
White non-Hispanic	64.71	4.93	50.7	78.6
Black non-Hispanic	37.42	27.49	0	68.7
Hispanic	18.76	16.82	0	47.2

Asian	13.14	17.11	0	45.4
Age 18-24	32.46	17.42	0	54.6
Age 25-34	45.0	14.74	0	67.1
Age 35-44	48.69	19.33	0	72.7
Age 45-64	63.97	6.39	49.7	77.5
Age 65 and over	64.87	19.85	0	80.3
High School Degree or Less	30.10	5.30	18	43
Some College	31.14	4.27	16	40
College Degree	38.73	6.52	26	66

Note: Values are voter turnout percentages for individuals in these groups.

Variables Measuring Voter Mobilization	Central Tendency/Average	Standard Deviation	Minimum (\$)	Maximum (\$)
Gubernatorial Race	No	-	-	-
Senate Race	No	-	-	-
Campaign Finance (\$)	103,000,000	160,000,000	2,671,428	1,070,000,000

This research assesses the impact of state voting laws on voter turnout by running two multivariate regression models across the 50 states and the District of Columbia. The first model solely compares the effects of state voting laws on voter turnout, while the second model expands to include resources-based and mobilization variables. Model 1 in Table 3 shows that state voting laws on their own do not have statistically significant effects on voter turnout. However, when accounting for other variables that contribute to voter-based resources and mobilization, then several voting laws have a statistical impact on voter turnout. Specifically, the results demonstrate statistically significant effects for no-excuse absentee voting, the number of days for early voting, and the voter registration closing period on voter turnout. For instance, when controlling for the state-level characteristics, no-excuse absentee voting has a statistically significant and positive impact on turnout. On average, in 2016, states with no-excuse absentee

voting had a 0.07% increase in voter turnout than states that require an excuse to vote by absentee ballot. In addition, states with longer early voting periods resulted in a 0.07% increase in voter turnout than states with shorter or no early voting periods. Lastly, the closing registration period has an impact on voter turnout. The estimated effect on voter turnout is higher in states where the voter registration deadline is closer to the election by 0.01% than in states with farther registration deadlines.

Table 3: Multivariate Regression Cross-Sectional Model of Voter Turnout by U.S. State and Washington, DC 2016

	Model 1	Model 2
No-Excuse Absentee Voting	-0.299 (2.2)	0.069** (0.8)
Early Voting	-4.025 (2.6)	-1.373 (0.8)
Early Voting Period	0.118 (0.1)	0.071* (0.0)
Universal Mail-In Voting	3.229 (3.7)	1.160 (1.3)
Automatic Voter Registration	-0.318 (3.1)	-1.093 (1.0)
Same-Day Voter Registration	1.986 (2.0)	0.0385 (0.6)
Registration Deadline Days Before Election	-0.122 (0.1)	-0.010** (0.0)
White Non-Hispanic		0.222** (0.1)
Black		0.017 (0.0)
Asian		-0.052* (0.0)
Hispanic		0.001 (0.0)
Age 18-24		0.003 (0.0)
Age 25-34		-0.041

		(0.0)
Age 35-44		0.009 (0.0)
Age 45-64		0.615* (0.1)
Age 65 and over		-0.012 (0.0)
High School Degree or Less		-0.136 (0.5)
Some College		-0.238 (0.5)
College Degree		0.230 (0.5)
Campaign Raising		2.19e-09 (1.79e-09)
Gubernatorial Race		0.190 (0.7)
Senate Race		0.746 (0.6)
Observations	51	51
R ²	0.18	0.96

*Note: Robust standard errors in parathesis. * $p < 0.01$; ** $p < 0.05$*

In addition, Model 2 makes the case for the resources-based theory and the demographic factors that likely impact voter turnout. For one, the age categories for U.S. voters are consistent with previous research. The model reveals a statistically significant curvilinear relationship between age and turnout, which means that turnout peaks for voters 45-64 years old and then declines. According to the results, voters in this age bracket were 0.62% more likely to vote in the 2016 election. Following this logic, voter turnout is seemingly lower for younger age brackets because young Americans are likely busy, preoccupied, and not as politically engaged as older adults. In addition, White non-Hispanic voters were more likely to get out the vote by 0.22% compared to Black, Hispanic, and Asian voters. This speaks to considerable research on

how minority voters have less access to income, education, and voter resources which match the findings in this study.

While these findings inspire confidence in alternative voting methods, preliminary results also reveal areas that can benefit from more research. For example, the findings in Model 2 match scholars' claim that automatic voter registration (AVR) reduces turnout because AVR likely registers individuals who don't care and who wouldn't otherwise register and/or vote.²¹ At the same time, Model 2 suggests that same-day registration is a favorable condition for higher rates of voting. This is likely due to the fact that it streamlines the registration and voting process. While Model 2 reveals these patterns, it's important to note that they are preliminary results and that both, automatic and same-day registration, are not statistically significant in the model. There are additional findings in this study that are worth mentioning, as well. As expected, education reveals an initial positive effect on voter turnout, with college graduates more likely to vote than individuals who completed high school or some college. In addition, the existence of a statewide race also on the ballot likely plays a role in turnout since the presence of gubernatorial and/or senatorial races motivated individuals in those states to vote at slightly higher rates. Preliminarily, U.S. Senate races seemed to have drawn out more people to vote in 2016. Unexpectedly, however, campaign finance figures show a negative relationship with voter turnout. Committees and candidates that raised higher amounts of money tended to have lower voter turnout rates in their states according to this model. This could be for various underlying reasons. For example, voters in select competitive districts could be persuaded to donate more frequently and individuals that contribute to candidates and political parties are already likely planning to vote. On the other hand, there is perhaps no or less incentive for undecided voters to

²¹ Mary Fitzgerald, "Greater Convenience but Not Greater Turnout—The Impact of Alternative Voting Methods on Electoral Participation in the United States," *American Politics Research*, 33, no. 6 (2005): 854-58.

donate or vote. While there is robust groundwork for the variables mentioned above at the state-level, further research is needed to isolate these factors and determine their impacts on turnout.

Overall, these findings add to the growing scholarship on the influence of electoral reforms. Refuting earlier research on absentee voting, the empirical evidence in this study reveals that no-excuse absentee voting had a positive and statistically significant impact on voter turnout at the state-level during the 2016 elections. However, the results for early voting are a bit more tenuous. While early voting on its own did not show a statistically significant effect, establishing an early voting period of at least the 15-day average likely increases turnout. With that said, additional research is needed to assess the underlying factors that contribute to early voting success, such as the number and physical locations of early voting places. Lastly, this research makes the case for moving voter registration deadlines closer to election day. Consistent with Wolfinger and Rosenstone's 1972 presidential election study, this study follows that the farther the registration deadline is from election day, the lower the voter turnout.²²

In summary, these findings present encouraging signs to those interested in increasing voter turnout. Based on findings from the 2016 election, increasing the number of states with no-excuse absentee voting, increasing early voting periods, and moving voter registration deadlines closer to election day may help increase the turnout of future elections. In all, this speaks to the cost-benefit theory of voting in the literature. If the cost of voting is lowered, more people will vote.

6. Conclusion

Through a multivariate regression model that accounts for independent variables predicted to influence voter participation, this study determines the impact of voting reforms on

²² Wolfinger and Rosenstone, *Who Votes?*.

turnout during presidential elections. Specially, this research sheds light on structural-legal reforms, especially no-excuse absentee voting, early voting procedures, and the voter registration period, and how they relate to electoral participation. It demonstrates, at the state-level, that no-excuse absentee voting, longer early voting periods, and closer voter registration deadlines to election day, positively and statistically significantly increase voter turnout. While this holds true, policymakers should not ignore the role that demographics, such as race, education, age, and political mobilization play on voter turnout. While not all variables in this study were statistically significant within the multivariate regression model, preliminary results and previous research show that these factors are worth considering when assessing voter turnout.

This research study did contain certain limitations, and with that, opportunity for alternative approaches to address state voting laws. For one, this multivariate analysis is a cross-sectional study with observations recorded only for the 2016 presidential election rather than over multiple presidential election years. Future research models should assess alternative voting methods, demographics, and mobilization indicators across multiple presidential election years. This may provide insight on the impacts of voting reforms before and after they were implemented and identify which methods have proven most successful after enactment. Additionally, analyzing voter mobilization through another measure could better portray its impact on voter turnout. While the presence of a concurring election can measure electoral competitiveness, perhaps the presence of senatorial and/or gubernatorial races should be modified to the closeness of results for these elections. The reasoning is that in close senate and/or gubernatorial races, voters are more invested and likely to get out the vote. As a result, this may be a more effective indicator of electoral competitiveness and mobilization. Lastly, when the data becomes available, this analysis should be performed for the 2020 presidential

election. It would be interesting to assess how the changes to voting processes due to the COVID-19 pandemic and the competitiveness of this presidential race impacted voter turnout in one of the county's most unprecedented elections.

Nevertheless, scholars, policymakers, and election officials should be encouraged by these findings. To date, the research in this field has determined that voting laws do little to increase voter turnout. However, scholars were looking at voting reforms and the national impact by aggregating all U.S. voters rather than assessing voter turnout state-by-state. This research analyzes voter turnout by state as well as through contributing factors. By doing so, there are variables considering the structural-legal theory of voter participation as well as variables that shed light on the resources-based and mobilization theories. It attempts to capture the effect of immeasurable underlying variables and isolate the impact of alternative voting methods in order to analyze their true impact on electoral participation.

Policymakers and stakeholders should consider these results and assess the voting laws implemented throughout the United States. Since the findings show that more accessible voting options led to higher voter turnout, lawmakers should look into expanding these methods in ways that are secure and maintain the integrity of the electoral system. Policies, like the fundamental NVRA, should continue because they reduce the cost of registration particularly for underrepresented groups. Likewise, states without early voting options should look into offering this alternative to voters. For the majority of states that do offer this, state officials should look at expanding the early voting period to at least the 15-day average. And, as electoral systems become more sophisticated and modern, officials should consider expanding no-excuse absentee voting options according to this 2016 presidential election study. While the reasons that voters decide to participate in an election vary widely, there are ways that state lawmakers can facilitate

and lessen barriers to voter registration and casting a ballot. This study offers several voting methods that can be introduced incrementally and widely to reach all eligible voters in a state. These structural-legal reforms address resources-based concerns by providing alternative and flexible options to vote thereby reducing the cost to vote and increasing the benefits that come with electoral participation along the way.

7. Bibliography

“115th Congress (January 3, 2017-January 3, 2019)” *Part of: New Senators 2001-present*. United States Senate. Available at <https://www.senate.gov/senators/NewSenators.htm>.

“2016 elections, candidates, and committees raising totals for each state and Washington, D.C.” *Part of: Election Overview – Election Summary*. FollowThe Money.org. Available at <https://www.followthemoney.org/tools/election-overview?s=AL&y=2016>.

“2016 Gubernatorial Elections in the States and Territories” *National Governors Association*. Available at <https://www.nga.org/governors/elections/>.

“Current Population Survey Voting and Registration Supplement 2004-2016 table” *Part of: A Resource for State Preelection Polling*. Pew Research Center. Available at <https://www.pewresearch.org/methods/2020/08/18/a-resource-for-state-preelection-polling/>.

“Table 1: Reported Voting and Registration, by Sex and Single Years of Age: November 2016” *Part of: Voting and Registration in the Election of November 2016*. U.S. Census Bureau Current Population Survey. Available at <https://www.census.gov/data/tables/timeseries/demo/voting-and-registration/p20-580.html>.

“Table 1: Reported Voting and Registration, by Sex and Single Years of Age: November 2012” *Part of: Voting and Registration in the Election of November 2012*. Available at <https://www.census.gov/data/tables/2012/demo/voting-and-registration/p20-568.html>.

“Table: A-1: Income Summary Measures by Selected Characteristics: 2018 and 2019,” *Part of: Income and Poverty in the United States: 2019*. U.S. Census Bureau Current Population Survey. Available at <https://www.census.gov/library/publications/2020/demo/p60270.html>.

“Table: Annual Estimates of the Resident Population by Sex, Race, and Hispanic Origin for the United States: April 1, 2010 to July 1, 2019” Part of: *National Population by*

Characteristics: 2010-2019. U.S. Census Bureau. Available at

<https://www.census.gov/data/tables/time-series/demo/popest/2010s-national-detail.html>.

1970 Census of Population, Advance Reports: General Population Characteristics: 1970. U.S.

Census, 1970. Available at:

<https://www.census.gov/library/publications/1971/dec/pc-v2.html>.

Brody, Richard A. and Paul M. Sniderman, “From life space to polling place: The relevance of personal concerns for voting behavior,” *British Journal of Political Science* 7, no. 3 (1977): 337-60.

Brown, Robert D. and Justin Wedeking, “People Who Have Their Tickets but Do Not Use Them – ‘Motor Voter,’ Registration, and Turnout Revisited,” *American Politics Research*, 34, no. 4 (2006): 479–504.

Details for Same Day and Election Day Registration States. National Conference of State Legislatures. Available at

<https://www.ncsl.org/research/elections-and-campaigns/same-day-registration.aspx>.

Fitzgerald, Mary, “Greater Convenience but Not Greater Turnout—The Impact of Alternative Voting Methods on Electoral Participation in the United States,” *American Politics Research*, 33, no. 6 (2005): 842–67.

Green, Donald P. and Alan s. Gerber, “Introduction: Why Voter Mobilization Matters,” In *Get Out the Vote*, 3rd ed., (Brookings Institution Press), 1-10.

Jan Leighley and Jonathan Nagler, *Who Votes Now?*, (Princeton: Princeton University Press, 2014).

Neely, Grant and Lillard Richardson, “Who Is Early Voting? An Individual Level Examination.”
Social Science Journal, 38, no. 3 (2001): 381–92.

Rosenstone, Steven J. and John Hansen, *Mobilization, Participation, and Democracy in America*, (Michigan: The University of Michigan, 1993).

Rosenstone, Steven J., “Economic Adversity and Voter Turnout,” *American Journal of Political Science* 26, no. 1 (1982): 25-46.

Royce Crocker, “Voter registration and turnout: 1948-1998,” *CRS Report for Congress: CRS 122*. Washington, DC: Congressional Research Service, (1996).

Schlozman, Kay Lehman and Sidney Verba, *Injury to Insult*, (Cambridge: Harvard University Press, 1979).

State Laws Governing Early Voting. National Conference of State Legislatures. Available at
<https://www.ncsl.org/research/elections-and-campaigns/early-voting-in-state-elections.aspx>.

Table 1: *Voter Registration Deadlines*. National Conference of State Legislatures. Available at
<https://www.ncsl.org/research/elections-and-campaigns/voter-registration-deadlines.aspx>.

Table 2: *States that have enacted automatic voter registration*. National Conference of State Legislatures. Available at
<https://www.ncsl.org/research/elections-and-campaigns/automatic-voter-registration.aspx>.

Timpone, Richard J., “Ties That Bind: Measurement, Demographics, and Social Connectedness,” *Political Behavior*, 20, no. 1 (1998): 53–77.

Verba, Sidney and Norman H. Nie, *Participation in America: Political Democracy and Social Equality*, (New York: Harper and Row, 1972).

VOPP: Table 1: *States with No-Excuse Absentee Voting*. National Conference of State Legislatures. Available at

<https://www.ncsl.org/research/elections-and-campaigns/vopp-table-1-states-with-no-excuse-absentee-voting.aspx>.

Wolfinger, Raymond E. and Steven J. Rosenstone, *Who votes?*, (New Haven, CT: Yale University Press, 1980).

Zip, John F., “Perceived Representativeness and Voting: An Assessment of the Impact of ‘Choices’ and ‘Echoes,” *American Political Science Review* 79, (1985): 50-61.

8. Curriculum Vita

Dalexi Carrillo is a candidate for a Master of Science in Data Analytics and Policy with a Certificate in Intelligence from the Johns Hopkins University. She was born in Queens, New York on April 16, 1994, and lived in Fairfield County, Connecticut for most of her childhood. She has a bachelor’s degree in International Studies from American University, where she also minored in Political Science and earned a Certificate in Advanced Leadership Studies. Dalexi’s professional experience has been in political engagement and communication strategy. Currently, Dalexi works for the Business-Industry Political Action Committee (BIPAC) as the Manager, Member and Partner Advocacy Services. In this role, she provides resources and strategy to corporations and trade associations looking to engage stakeholders in grassroots advocacy and voter education.